Letters

The War on Drugs

Faced with the difficult task of waging a real war against drugs (Daniel E. Koshland, Jr., Editorial, 9 Sept., p. 1273) and the enormous commitment of energy and resources that such would take, a handful of this nation's officials and a few others have raised the white flag of surrender and advocated legalization of drugs. Embracing such a defeatist attitude would be a serious error and would destroy the nation.

I am far from alone in feeling this way. The 15 September *New York Times* (*1*) reported than an ABC News poll found that more than 90% of the American public *reject* decriminalizing all illicit drugs. The poll also found that the public believes, by a 2 to 1 ratio, that the legalization of drugs would lead to an increase in crime.

There are over 500,000 heroin abusers in this country and 6 million people who have a serious cocaine or crack abuse problem. Increasing numbers of our youth are abusing certain drugs. Surveys of high school students (*2*, p. 3) have shown dramatic increases in their use of cocaine over the last 10 years.

Reliable studies (*2*) have concluded that drug abuse and drug traffickers are responsible for much of the violent crime in our nation. These assertions are supported by data from the National Institute of Justice's Drug Use Forecasting Survey (*3*) which recently showed that in New York City, 79% of the surveyed arrestees tested positive for at least one drug (including marijuana), 63% tested positive for cocaine (including crack), and 25% tested positive for heroin. These data clearly underscore the relation between drug abuse and crime.

Some of those in favor of legalization would have us believe that the laws against drug use and drug trafficking are prohibitions against a manner of personal conduct or style and that they are the imposition of society's moral values on the individual. Rather, they are laws that prohibit conduct which destroys not only the individual users, but their families, the innocent victims of their crimes and the very foundation of a productive society.

The proponents of legalization are weak on the specifics of the implementation of a policy of "drugs for all." Some suggest that government should play a "big brother" role, providing fixed doses to addicts, thereby limiting drug use. There is no such thing as a fixed dose that will satisfy a drug addict's appetite for greater and greater quantities. Accordingly, the black market that legalizers say will be eliminated would, of necessity, exist to provide an additional avenue for obtaining that which is not available from "legitimate" sources.

Proponents of legalization also say that crime associated with drug trafficking will diminish once drugs become an acceptable commodity. They ignore history and the facts. We have only to look at Great Britain's desperate failure to relieve its heroin addiction problem through heroin distribution programs during the 1960s and 1970s to see that the opposite is closer to the truth.

Until 1970, heroin was freely prescribed in Britain by private doctors. But overprescription led to a doubling of the addicted population between 1970 and 1980. Then cheap heroin from Pakistan began flooding the black market. More potent than what the government was handing out, this heroin came without bureaucratic restrictions and the number of addicts quadrupled in 5 years. By 1986, the British Home Office estimated that there were 50,000 to 60,000 heroin addicts in the country. Unofficial estimates were three times greater.

How was crime in Britain affected by legalization? One 1978 study (*4*) showed that 50% of the addicts in government programs were convicted of crimes in their first year of participation. Unemployment among addicts remained chronic, as did use of other kinds of drugs. Another facet of the crime problem is that a number of drugs, crack in particular, have been shown to have behavioral effects that result in violent criminal conduct not limited to theft. "Designer" drugs are emerging that are likely to have similar effects as the drug sellers search for a product that gives quicker and more intense highs. Should the government distribute or condone these crime-inducing drugs too?

The proponents of legalization also argue that it would be cheaper to provide drugs to addicts than to enforce the laws. But, as drug abuse and crime would increase with legalization, we would still need the police, courts, prosecutors, and jails to deal with drug-related crime. Our current enforcement strategies have not worked because a truly effective war on drugs has yet to be launched on a national scale.

A real war must include interdiction of illicit drugs by the armed forces at the borders, in the air and on the high seas. It must include more federal funding for education and treatment on demand. It must include "federalization" of drug prosecution and incarceration. I will continue to strive to see that these ideas become part of the arsenal in the war on drugs. It is time to raise the battle flag, not wave the white one.

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1. *New York Times*, 15 September 1988, p. A23.
2. M. R. Chaiken and B. D. Johnson, *Characteristics of Different Types of Drug-Involved Offenders* (National Institute of Justice, Washington, DC, February 1988).
3. *Natl. Inst. Just. Rep. 208*, (March/April 1988), pp. 8–9.
4. J. S. Russell and Andrew NcNicholl, *Summary: British Experience with Narcotics Dependency* (Alcohol and Drug Commission, Ministry of Health, Province of British Columbia, Victoria, BC, Canada 1978), p. 2.

South African Visa Refusal

The news item "South Africa blocks AAAS visit" (News & Comment, 29 Apr., p. 595) refers to the refusal by the South African government of travel visas to members of the AAAS and other U.S. scientific organizations on 5 April 1988.

The Medical School of the University of the Witwatersrand immediately protested the action of the government in a press statement. Together with some other South African universities, we have consistently protested the principle and practice of detention without trial and have opposed apartheid in all forms. Concerned doctors and other health professionals welcomed the opportunity to discuss the effects of apartheid on the provision of health services and other medical issues of mutual concern. The AAAS might well conclude from the refusal to admit the delegation that the South African government has something to hide. There is obviously room for improvement in our medical services, but there are also many positive features that would have been evident, including the training of more doctors of all races for the country's future health needs.

We would all have benefited from this type of contact at a time when there is an increasing and somewhat sanctimonius clamor in the United States for a boycott of South Africans of all races and political persuasions.

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Support for IIASA

As Saunders Mac Lane notes in his 2 September letter (p. 1144) about the International Institute for Applied Systems Analysis (IIASA), he has raised the same concerns before in the councils of both the National Academy of Sciences and the

American Academy of Arts and Sciences. In neither body did his views prevail. Nonetheless, his concerns remain timely. They will remain so until the day when we can all agree that international economics, political maneuverings, the earth's infinite ecology, and all of human behavior have been precisely captured in one unambiguous, verified set of models, mathematical or otherwise.

In the meantime, Mac Lane seems to suggest that we should close our doors, that it is a waste of money to apply research results (on atmospheric chemistry and fossil fuel use, for example) to issues on the public agenda (such as global warming). Such efforts necessarily require combining models, empirical data, and mechanistic theories in an analysis that, no matter how verifiable its component parts, is itself ultimately unverifiable in the aggregate. Unplanned "experiments" on the earth's atmosphere we can only run once.

To discover constructive analysis along the fuzzy boundary between science and policy is a touchy business where there are temptations to lurch to one side or the other. If we stray too far from the scientific touchstones of objectivity and reproducibility, we will be guilty of "grandiloquence," to use Mac Lane's term, and serve neither policy-makers nor the scientific community well. To build an ivory tower, however, declining to apply research to current policy issues until unrealistic (and perhaps unrealizable) standards of scientific rigor are met, would be an equal abnegation of responsibility.

As IIASA's director, council, and the U.S. Committee for IIASA work to balance the Institute's program between these competing seductions, it is valuable to have critics such as Mac Lane challenging us to be ever vigilant against the first temptation and not stray too far from the standards of science. Yet there are equally vociferous critics on the other side—challenging us not to be too cautious in drawing timely relevant policy conclusions from limited scientific knowledge.

Finally, Mac Lane suggests that IIASA's 15-year history is an elaboration of the system dynamics of Forrester and Meadows. Nothing could be further from the truth. IIASA was indeed founded in 1972, the year *Limits to Growth* (*1*) was published; and IIASA did host, during its first decade, a series of seven "Global Modeling Conferences." These meetings were designed to document and review global models in detail by critics and proponents alike, precisely the sort of peer review effort that Mac Lane advocates. The conference played a big part in causing the original proponents of global modeling to retreat from their initial enthusiasm and gave everyone concerned a better understanding of what models could and could not do.

The Institute's own research program has always been kept purposely diverse. Earlier IIASA global studies of food and energy that Mac Lane cites share some common features with some of the better known global models of the 1970s, including those conducted by our own National Academy of Sciences. Perhaps for that reason, of the Institute's products these have remained the most controversial, both within IIASA and elsewhere. But important work on environmental issues, on demographic concerns, and on mathematical programming have, in fact, been the mainstay of the Institute's agenda; and much of this research is not based on global modeling of any sort.

The fundamental question facing our society is whether we can bring the best scientific minds to bear on urgent problems confronting us. IIASA has been an important institution trying to address these problems, and provide some, albeit imperfect, insight. We strongly believe that the continued support of the Institute is warranted.

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REFERENCE

1. D. L. Meadows *et al.*, *The Limits to Growth* (Universe, New York, 1987).

The News & Comment article by David Dickson about IIASA (15 July, p. 285) is an accurate reflection of the current position and development of the Institute. Established in 1972, IIASA has a unique track record in applying systems analysis to the study of large-scale issues such as sustainable development, or population growth. It is surprising that the article should have provoked the letter from Mac Lane, but the multidisciplinary approach to examining policy issues is often unsatisfying for scientific specialists.

Mac Lane is a great algebraist and one of America's most distinguished mathematicians. However, his comments about the absence of science in IIASA's work ignore the fact that many of the most difficult problems we have to face cannot even be precisely formulated in the present state of knowledge, let alone solved by existing techniques of science.

The variables determining world energy or food supplies, to which he refers, are so numerous, and interconnected in so many hidden ways, that the best we can do is exactly what he describes—make models that in the first instance are not verifiable, but that can be amended and adjusted in the hope that they will come to provide an understandable view of the phenomenon. Verification must inevitably be piecemeal and partial. Such models, although unsatisfying to many scientists, are still the best guide to policy that we have.

If a mathematician does not see them as providing crisp solutions, it is perhaps because the problems in question are not mathematical. They lie at the interface between nature and man. It would be simpler to forget about them and concentrate on pure science alone, but that is a luxury not permitted to the late 20th century. Problems of energy, food, the environment, population, and the impact of technology are intrusive: they will not leave us alone. IIASA was established in the belief that science can contribute to the development of tools to examine and hopefully deal with these societal problems.

The researchers at IIASA are among the first to agree that the methods currently used to tackle these problems need to be improved. That is why their work is largely focused on developing better methods to replace them. Anyone concerned with increasing the chances of our collective survival must wish them luck, while offering the support they require to succeed.

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Biodiversity Bill

I could not agree more with the biologists calling for an international species survey ("Hard choices ahead on biodiversity," Research News, 23 Sept., p. 1604). If we are serious about protecting biological diversity, we have to know what's out there, and in what quantity.

That is why I will be introducing a bill in the U.S. Senate to provide a framework for assessing and managing the diversity of global species. Once we adopt this measure, we'll be well on our way to bringing biodiversity to the top of the environmental agenda—where it belongs.

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